

Connecticut Education Network Commission Update

Legislative Office Building
December 12, 2001



K12 Survey Process Completion

- Database status & evolution to web presence
- Final reports to districts
- K12 Preliminary Findings
 - Physical Infrastructure
 - Networking Equipment & Wiring
 - Connections within a district
 - Connections from the District out to the Internet
 - Network Support Service
- Preliminary recommendations

CEN Deployment Activities

- Data Center Completion
- Help Desk / Network Operations Center
- Phase 1 Sites (1st 6 K12, Backbone, HiEd)
 - Circuit Installations / Circuit Extensions
 - CEN Equipment Installation
 - Cutover planning / Execution
- Phase 2 Sites

Long-Term Lease Fiber Contract

- State Master Agreement
- Leased “Unlit” Fiber over extended term
- Long term aggregate cost moved into up-front payments, lower ongoing cost
- Monitoring, Maintenance, Repair by vendor

Other Leased Fiber Notes

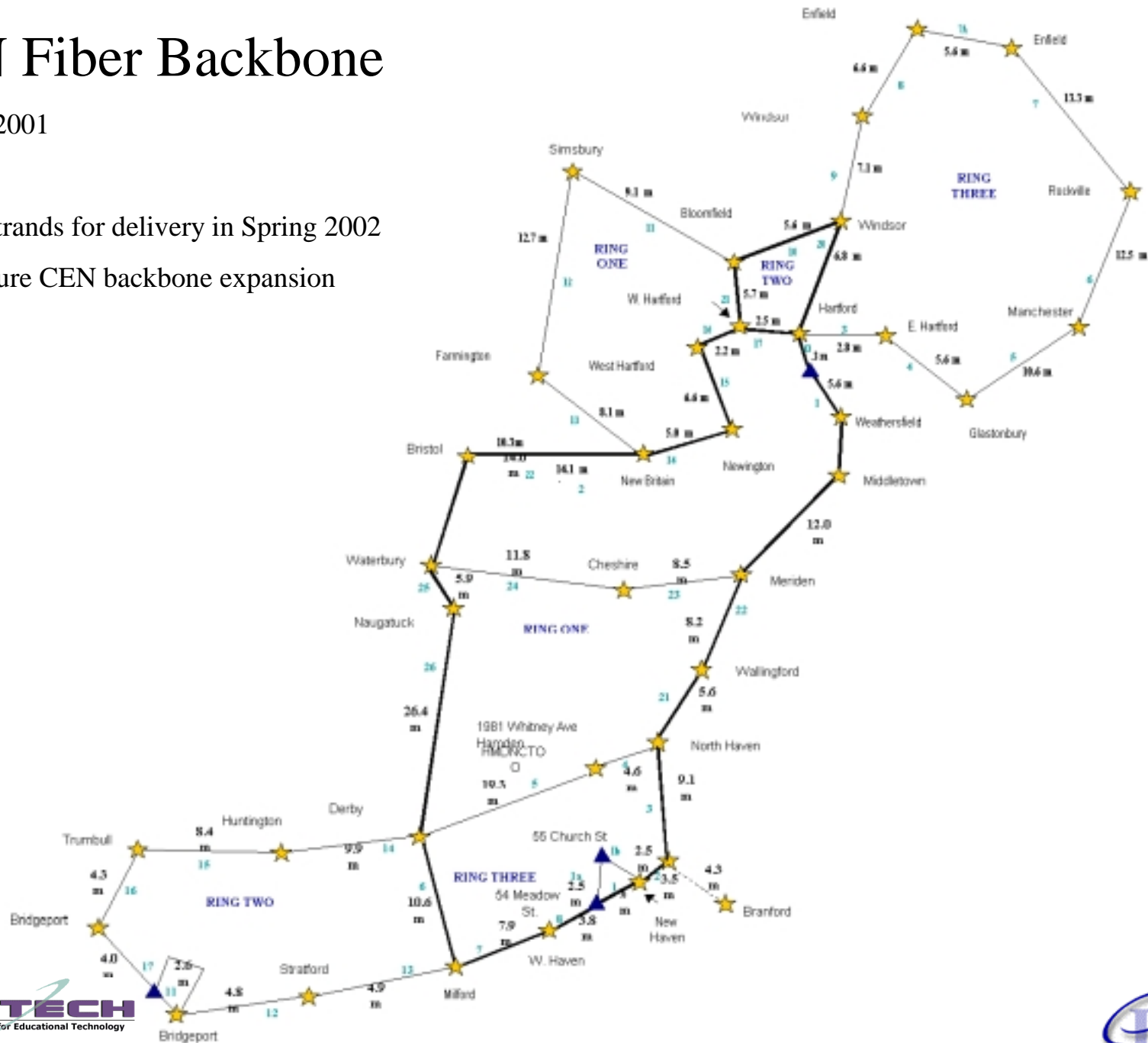
- Fully Redundant links to each location
- 6 times more bandwidth to grow into
- Less equipment to be upgraded in future
- Vendor is responsible for maintaining the cables on the poles and outside break/fix

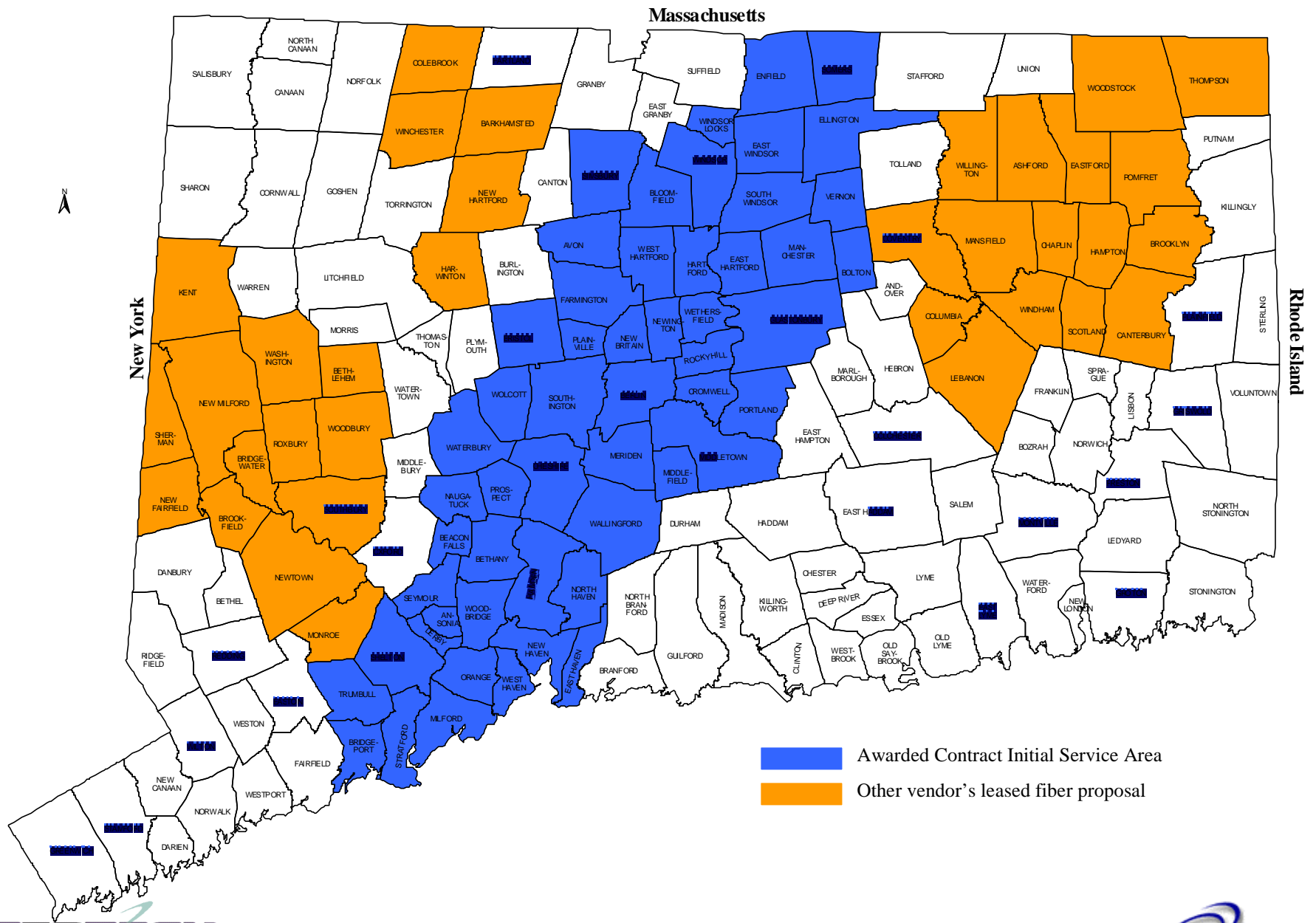
CEN Fiber Backbone

October 2001

4 Strands for delivery in Spring 2002

Future CEN backbone expansion





Leased Fiber –vs- Traditional Services

	<u>1 Year</u>	<u>2 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>15 Years</u>
Leased Fiber Services	\$3,450,000 One Time				
	\$292,950 Operating				
	\$4,626,450	\$4,919,400	\$5,798,250	\$7,263,000	\$8,272,750
Traditional Services	\$945,500 One Time				
	\$1,871,160 Operating				
	\$2,816,660	\$4,687,820	\$10,301,300	\$19,657,100	\$29,012,900

Other Contract Thoughts

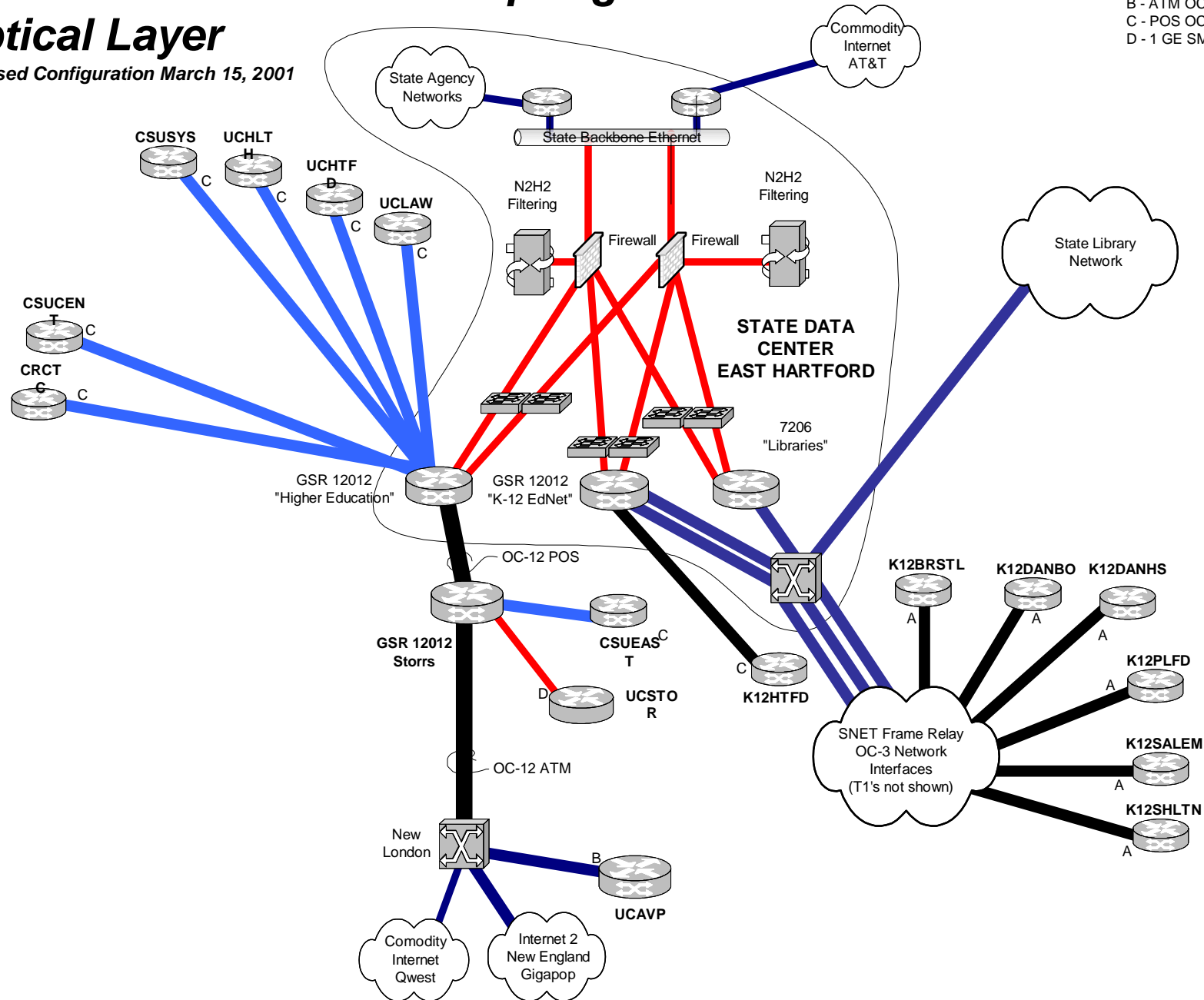
- Expect to issue another RFP for additional leased fiber providers
- Will be using this contract in combination with traditional services
- Great deal of enthusiasm in networking community

State Education Network Spring 2001

Optical Layer

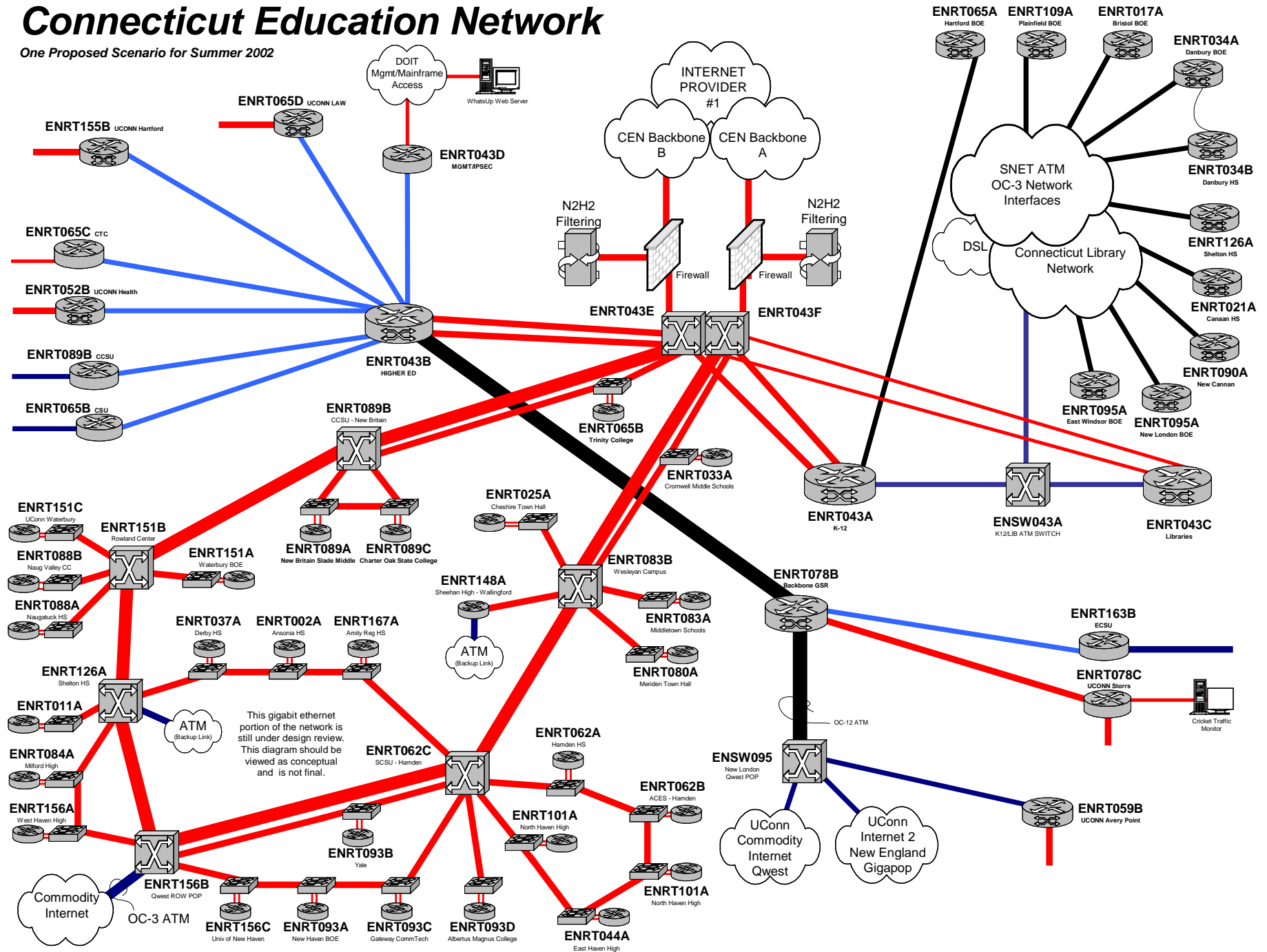
Proposed Configuration March 15, 2001

Edge Router Types:
 A - ATM OC-3 / 2 FE UTP
 B - ATM OC-3 / 1 GE MMF
 C - POS OC-3 / 1 GE MMF
 D - 1 GE SMF / 1 GE MMF



Connecticut Education Network

One Proposed Scenario for Summer 2002



Higher Education Forum

- Attendance from 6 Privates, 3 Publics
- Discussion on collaborative efforts, K-12 interactions, inter-institutional needs
- Internet Service Provider Provisioning
- Monthly to bi-monthly meetings anticipated

Proposed Connecticut Higher Education ISP Model

(CEN Funded Circuits)

N = Number of Participating Colleges

M = Requested Megabits for that site

Model 2

Cost Calculator

$$\text{Cost per site} = (\$250,000 / n / 12) + (\underline{\$320} * M)$$

Model Examples (CEN Backbone Circuits)

Current Stand
Alone Costs

Collaborative
Model

Collaborative
Model *Plus*

10 Institutions
150 Mbps

10 Institutions
150 Mbps

10 Institutions
234 Mbps

\$101,459 / mo

\$49,483 / mo

\$76,500 / mo

CEN Website

<http://www.doit.state.ct.us/cen>

FAQ's

Architecture

Engineering

Status Monitoring / Traffic Monitoring



Questions & Discussion

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